tive may provide a hybrid approach in which the dataset bundles that cannot be sorted by rank are sold independently.

The systems and methods of the present invention may be implemented in many different computing environments **120**. For example, they may be implemented in conjunction with a special purpose computer, a programmed microprocessor or microcontroller and peripheral integrated circuit element(s), an ASIC or other integrated circuit, a digital signal processor, electronic or logic circuitry such as discrete element circuit, a programmable logic device or gate array such as a PLD, PLA, FPGA, PAL, and any comparable means. In general, any means of implementing the methodology illustrated herein can be used to implement the various aspects of the present invention. Exemplary hardware that can be used for the present invention includes computers, handheld devices, telephones (e.g., cellular, Internet enabled, digital, analog, hybrids, and others), and other such hardware. Some of these devices include processors (e.g., a single or multiple microprocessors), memory, nonvolatile storage, input devices, and output devices. Furthermore, alternative software implementations including, but not limited to, distributed processing, parallel processing, or virtual machine processing can also be configured to perform the methods described herein.

The systems and methods of the present invention may also be partially implemented in software that can be stored on a storage medium, executed on programmed general-purpose computer with the cooperation of a controller and memory, a special purpose computer, a microprocessor, or the like. In these instances, the systems and methods of this invention can be implemented as a program embedded on personal computer such as an applet, JAVA® or CGI script, as a resource residing on a server or computer workstation, as a routine embedded in a dedicated measurement system, system component, or the like. The system can also be implemented by physically incorporating the system and/or method into a software and/or hardware system.

Additionally, the data processing functions disclosed herein may be performed by one or more program instructions stored in or executed by such memory, and further may be performed by one or more modules configured to carry out those program instructions. Modules are intended to refer to any known or later developed hardware, software, firmware, artificial intelligence, fuzzy logic, expert system or combination of hardware and software that is capable of performing the data processing functionality described herein.

The foregoing descriptions of embodiments of the present invention have been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise forms disclosed. Accordingly, many alterations, modifications and variations are possible in light of the above teachings, may be made by those having ordinary skill in the art without departing from the spirit and scope of the invention. It is therefore intended that the scope of the invention be limited not by this detailed description. For example, notwithstanding the fact that the elements of a claim are set forth below in a certain combination, it must be expressly understood that the invention includes other combinations of fewer, more or different elements, which are disclosed in above even when not initially claimed in such combinations.

The words used in this specification to describe the invention and its various embodiments are to be understood not only in the sense of their commonly defined meanings, but to include by special definition in this specification structure, material or acts beyond the scope of the commonly defined meanings. Thus if an element can be understood in the context of this specification as including more than one meaning, then

its use in a claim must be understood as being generic to all possible meanings supported by the specification and by the word itself.

The definitions of the words or elements of the following claims are, therefore, defined in this specification to include not only the combination of elements which are literally set forth, but all equivalent structure, material or acts for performing substantially the same function in substantially the same way to obtain substantially the same result. In this sense it is therefore contemplated that an equivalent substitution of two or more elements may be made for any one of the elements in the claims below or that a single element may be substituted for two or more elements in a claim. Although elements may be described above as acting in certain combinations and even initially claimed as such, it is to be expressly understood that one or more elements from a claimed combination can in some cases be excised from the combination and that the claimed combination may be directed to a subcombination or variation of a sub-combination.

Insubstantial changes from the claimed subject matter as viewed by a person with ordinary skill in the art, now known or later devised, are expressly contemplated as being equivalently within the scope of the claims. Therefore, obvious substitutions now or later known to one with ordinary skill in the art are defined to be within the scope of the defined elements.

The claims are thus to be understood to include what is specifically illustrated and described above, what is conceptually equivalent, what can be obviously substituted and also what essentially incorporates the essential idea of the invention.

The invention claimed is:

1. A computerized method of assessing a value of traffic speed information in a set of incoming GPS probe data, comprising:

extracting GPS information and one or more parameters from incoming GPS probe data using one or more GPS components configured to receive and process the incoming GPS probe data, the one or more parameters including a measure of confidence of positional measurement precision in the GPS information for determining spatial and temporal coverage on a road network;

performing an initial evaluation of the incoming GPS probe data to filter unneeded data points and conduct a preliminary assessment of probe coverage relative to a geographical grouping of roadway links; and

modeling the incoming GPS probe data relative to the geographical grouping of roadway links to determine a road network coverage, within a computing environment comprised of hardware and software components that include at least one processor specifically configured to evaluate speed data in the incoming GPS probe data, by:

mapping the GPS probe data to match with the roadway links so that data points comprising the incoming GPS probe data are assigned directly to the roadway links,

smearing the GPS probe data by extending speed readings from the roadway links with assigned data points to neighboring roadway links within a given range,

summing lengths of the roadway links and neighboring roadway links to calculate a total mileage of all roadway links covered by the GPS probe data,

extending the assigned data points across a specified time period using different ranges to determine the road network coverage, and

determining a qualitative value of the assigned data points by translating a percentage of assigned data